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EXAMINER
AGWUMEZIE, CHARLES C

ART UNIT	PAPER NUMBER
3685	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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	Application No.	Applicant(s)
Office Action Summary	10/654,733	WILLIAMS, EMRYS J.
	Examiner	Art Unit	
	CHARLES C. AGWUMEZIE	3685	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>25 November 2009</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-2, 4-10, 12-31, 33-37 and 39</u> is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-2, 4-10, 12-31, 33-37 and 39</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date <u>12/22/03</u>.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____ .

DETAILED ACTION

Acknowledgements

1.   Applicant's amendment filed on November 25, 2009 is acknowledged.

Accordingly claims 1-2, 4-10, 12-31, 33-37 and 39 remain pending and have been

examined.

Response to Arguments

2.   Applicant's arguments with respect to claims1-2, 4-10, 12-31, 33-37 and have

been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   **Claims 1-2, 5, 7-10, 13, and 26, 28-29,** are rejected under 35 U.S.C. 103(a) as

being unpatentable over Walker et al U.S. Patent Application Publication No.

2006/0218098 A1 in view of Pitroda U.S. Patent Application No. 2005/0247777A1 and

further in view of Tognazzini U.S. Patent No. 5,739,512

5.   As per **claims 1, 9, and 26,** Walker et al discloses an Apparatus for use in transactions, comprising:

non-volatile memory containing a set of multiple identifiers associated with a same customer account, wherein said multiple identifiers are also known to an agency providing said customer account (fig. 1; 0025; 0026; "…plurality of predetermined single-use financial account identifiers…"), and

a processor operable to select for each of a plurality of transactions involving the same customer account, a different identifier from said set of multiple identifiers for use with the respective transaction (fig. 1; 0023; 0047; 0049; "…the encryption data changes for each use of the card so that … card number is different for each transaction…") and

a communications facility operable to communicate with a terminal (0004; …wireless connection…; 0047; cardholder transmits the single use number to merchant…;).

6.   What Walker et al does not explicitly disclose is:

wherein the apparatus is operable to:

receive bill details for a given transaction of said plurality of transactions from the terminal through the communications facility, wherein the bill details specify an amount to be paid,

generate a transaction record that includes the bill details, and a particular identifier selected by the processor from said set of multiple identifiers;

digitally sign the transaction record with a digital signature, the digitally signed

transaction record including the bill details and the particular identifier; and

transmit the digitally signed transaction record to the terminal through the

communications facility;

7.   Pitroda discloses an apparatus for use in transaction comprising:

receive bill details for a given transaction of said plurality of transactions from the

terminal through the communications facility wherein the bill details specify an amount

to be paid (0089, which discloses that the point of sales computer will download and

display the transaction details, as shown in FIG. 16, and transmit the transaction

information into the memory of the UET card, on which the transaction information may

be displayed for visual verification by the customer; 0099, which discloses the amount

of the transaction; 0100, which discloses that user has the option of entering an amount

for a tip or gratuity that is in addition to the amount to be paid for the product);

generate a transaction record from the bill details, wherein the transaction record

includes a particular identifier selected by the processor from said set of multiple

identifiers (*0089; 0100, which discloses "transmits completed details*

of the sales transaction to the point of sales computer, the UET

card, and the American Express service… the details include the

date of the transaction, the amount, the name of the retail

store or service (for the UET card and the American Express

service records), the name of the customer (for the American

Express and point of sales computers)

8.   Tognazzini discloses an apparatus for use in transaction comprising:

digitally sign the transaction record with a digital signature, the digitally signed

transaction record including the bill details and the particular identifier *(col. 2,*

lines 40-55, which discloses that the electronic copy may be

digitally signed by either the vendor, the customer or both

before sending it to the electronic mail address… a customer's

smart card may receive a copy of the digital receipt, process

the digital signature and then return the signed receipt to the

cash register for sending of the electronic receipts); and

transmit the digitally signed transaction record to the terminal through the

communications facility *(col. 2, lines 40-55, which discloses that a*

customer's smart card may receive a copy of the digital receipt,

process the digital signature and then return the signed receipt

to the cash register for sending of the electronic receipts);

Accordingly it would have been obvious to one of ordinary skill in the art at time

of applicant's invention to modify the method of Walker et al and incorporate the

apparatus, wherein the apparatus is operable to: receive bill details for a given

transaction of said plurality of transactions from the terminal through the

communications facility, wherein the bill details specify an amount to be paid, generate

a transaction record that includes the bill details, and a particular identifier selected by

the processor from said set of multiple identifiers; digitally sign the transaction record

with a digital signature, the digitally signed transaction record including the bill details

and the particular identifier; and transmit the digitally signed transaction record to the

terminal through the communications facility; in view of the teachings of Pitroda and

Tognazzini in order to facilitate transaction and further ensure security of the

transaction.

9.   As per **claim 2, and 10**, Walker et al further discloses the apparatus, wherein

each of the identifiers in said set of multiple identifiers is allocated by the agency

uniquely to the apparatus (figs. 1 and 10; 0049; 0093; "…instructing card holder to

obtain a new device with list of single-use credit card numbers…").

10.   As per **claims 4, 12 and 27**, both Walker et al and Pitroda failed to explicitly

disclose the apparatus, wherein the digital signature is generated using a cryptographic

key contained within the non-volatile memory.

Tognazzini discloses the apparatus, wherein the digital signature is generated

using a cryptographic key contained within the non-volatile memory (col. 2, lines 40-55).

Accordingly it would have been obvious to one of ordinary skill in the art at time

of applicant's invention to modify the method of Walker et al and incorporate the

apparatus, wherein the transaction record includes a digital signature that is generated

using a cryptographic key contained within the non-volatile memory in view of the

teachings of Tognazzini in order to ensure adequate security.

11.   As per **claim 5 and 13**, Walker et al further discloses the apparatus, wherein

the transaction record is encrypted (0009; 0023).

12.   As per **claim 7**, Walker et al further discloses the apparatus, wherein said

apparatus is operable to engage a first class of terminals external to the apparatus for

making a transaction, and a second class of terminals external to the apparatus to enter

or to update account information stored in the non-volatile memory (fig. 3 and 4; 0093).

13.   As per **claim 8**, Walker et al failed to explicitly disclose the apparatus, further

comprising first and second power circuits that are activated by said first and second

class of terminals respectively, wherein activation of said second power circuit does not

allow account information to be entered or updated in at least certain portions of said

non-volatile memory.

Pitroda discloses the apparatus, further comprising first and second power

circuits that are activated by said first and second class of terminals respectively,

wherein activation of said second power circuit does not allow account information to be

entered or updated in at least certain portions of said non-volatile memory (see figs. 3;

0014).

Accordingly it would have been obvious to one of ordinary skill in the art at time

of applicant's invention to modify the method of Walker et al and incorporate the

apparatus, further comprising first and second power circuits that are activated by said

first and second class of terminals respectively, wherein activation of said second power

circuit does not allow account information to be entered or updated in at least certain

portions of said non-volatile memory in view of the teachings of Pitroda in order to ensure sufficient power for the maximum operation of the device.

14.   As per **claim 28**, Walker further discloses the method, wherein the transaction device is associated with a customer account, and wherein said multiple identifiers are also known to an agency providing said customer account, but failed to explicitly disclose the method further comprising:

transmitting the transaction record from the terminal to an agency computer;

accessing an account record for the customer account based on the selected identifier included in the transaction record;

validating the transaction and

updating the account record in respect of the validated transaction.

Pitroda discloses the method further comprising:

transmitting the transaction record from the terminal to an agency computer (0100, which discloses the CIU transmits completed details of the sales transaction to the point of sales computer, the UET card, and the American Express service);

accessing an account record for the customer account based on the selected identifier included in the transaction record (0100);

validating the transaction (0099; 0100) and

updating the account record in respect of the validated transaction (0099; 0100).

Accordingly it would have been obvious to one of ordinary skill in the art at time of applicant's invention to modify the method of Walker et al and incorporate the

apparatus comprising, transmitting the transaction record from the terminal to an

agency computer; accessing an account record for the customer account based on the

selected identifier included in the transaction record; validating the transaction and

updating the account record in respect of the validated transaction in view of the

teachings of Pitroda in order to facilitate transaction and ensure adequate security

15.   As per **claim 29**, Walker failed to explicitly disclose the method, wherein prior to

transmitting the transaction record from the terminal to the agency computer, the

terminal incorporates its own copy of the bill into the transaction record.

Pitroda discloses the method, wherein prior to transmitting the transaction record

from the terminal to the agency computer, the terminal incorporates its own copy of the

bill into the transaction record (0089; 0099; 0100).

Accordingly it would have been obvious to one of ordinary skill in the art at time

of applicant's invention to modify the method of Walker and incorporate the method,

wherein prior to transmitting the transaction record from the terminal to the agency

computer, the terminal incorporates its own copy of the bill into the transaction record in

view of the teachings of Pitroda in order to ensure accurate recording of the transaction

while avoiding errors.

16.   **Claims 6,** is rejected under 35 U.S.C. 103(a) as being unpatentable over Walker

et at U.S. Patent Application Publication No. 2006/0218098 A1 in view of Pitroda U.S.

Patent Application No. 2005/0247777A1and in view of Tognazzini U.S. Patent No.

5,739,512 and further in view of Palomo et al U.S. Patent Publication No. 2003/0120527

A1.

17.   As per **claim 6**, both Walker et al, Pitroda and Tognazzini failed to explicitly

disclose the apparatus, wherein said apparatus is provided within inert packaging to

allow implantation into the human body.

Palomo et al discloses the apparatus, wherein said apparatus is provided within

inert packaging to allow implantation into the human body (0025, which discloses that

'741 patent describes a computer system and method for storage of individual medical

histories ... the size of which is that of a credit card including the possibility of implanting

the storage device under the skin of the patient's upper torso).

Accordingly it would have been obvious to one of ordinary skill in the art at time

of applicant's invention to modify the method of Walker et al and incorporate the

apparatus, wherein said apparatus is provided within inert packaging to allow

implantation into the human body as taught by Palomo et al in order to ensure adequate

security.

18.   **Claim 14,** is rejected under 35 U.S.C. 103(a) as being unpatentable over Walker

et al U.S. Patent Application Publication No. 2006/0218098 A1 in view of Pitroda U.S.

Patent Application No. 2005/0247777A1 and further in view of Tognazzini U.S. Patent

No. 5,739,512 and further in view of Okano et al (hereinafter "Okano") U.S. Patent No.

4,511,970

19.   As per **claim 14,** Walker, Pitroda, and Tognazzini failed to explicitly disclose the

method further comprising limiting the number of transaction performed during a given

period of time in order to prevent rapid read-out of the identifier

Okano discloses the method further comprising limiting the number of transaction

performed during a given period of time in order to prevent rapid read-out of the

identifier (col. 3, lines 55-65)

Accordingly it would have been obvious to one of ordinary skill in the art at time

of applicant's invention to modify the method of Walker et al and incorporate the method

further comprising limiting the number of transaction performed during a given period of

time in order to prevent rapid read-out of the identifier in view of the teachings of Okano

in order to ensure adequate security and further prevent fraud.

20.   **Claims 17-23 and 25,** are rejected under 35 U.S.C. 103(a) as being

unpatentable over Flitcroft et al (hereinafter "Flitcroft") U.S. Patent No. 7,136,835 B1 in

view of Carlisle et al (hereinafter "Carlisle") U.S. Patent No. 5,649,118 and further in

view of Tognazzini U.S. Patent No. 5,739,512

21.   As per **claim 17**, Flitcroft discloses a method comprising:

opening an account record in an agency computer system, wherein said agency

is to provide the account (*see fig. 2, which discloses allocate new*

limited use cards; col. 6, lines 30-50, which discloses

allocated by the credit card provider to the customer for his or her account; col. 7, lines 20-55; col. 14, lines 35-60)

generating a set of multiple identifiers to be used for transactions on the account (*col. 10, lines 28-55, which discloses a local card dispenser 128 can be employed to generate a plurality of limited-use cards 132 and/or a master credit card 134 for delivery to a customer*),

storing the set of multiple identifiers in the agency computer system *(see fig. 3, which discloses generate database of available credit card numbers)*, and

storing the set of multiple identifiers on a portable transaction device *(col. 10, lines 28-55, which discloses Instead of the personal computer 104, the numbers can be downloaded to a user's smart card though an appropriate interface. In a fourth embodiment, the single-use credit card numbers can be downloaded to a radio unit 140 (such as a portable telephone) via wireless communication)*

22.   What Flitcroft does not explicitly disclose is:

receiving a public key from the portable transaction device;

receiving from a terminal, a digitally signed transaction record comprising a digital signature generated on the portable transaction device wherein the digitally signed transaction record comprises bill details provided by the terminal to the portable transaction device prior to the creation of the digital signature, wherein the bill details specify an amount to be paid for a transaction corresponding to the transaction record,

wherein the digitally signed transaction record further comprises a particular identifier

selected by the portable transaction prior to the creation of the digital signature, and

decrypting and validating the digital signature of the digitally signed transaction

record with the public key.

23.   Carlisle discloses the method comprising:

receiving a public key from the portable transaction device (col. 8, lines 15-65);

and

decrypting and validating the digital signature with the public key *(col. 12,*

lines 50-65, which discloses deciphers the digital signature

using the provided public key…).

24.   Tognazzini discloses the method comprising:

receiving from a terminal, a digitally signed transaction record comprising a

digital signature generated on the portable transaction device wherein the digitally

signed transaction record comprises bill details provided by the terminal to the portable

transaction device prior to the creation of the digital signature, wherein the bill details

specify an amount to be paid for a transaction corresponding to the transaction record,

wherein the digitally signed transaction record further comprises a particular identifier

selected by the portable transaction prior to the creation of the digital signature *(col.*

2, lines 40-55, which discloses that the electronic copy may be

digitally signed by either the vendor, the customer or both

before sending it to the electronic mail address… a customer's

smart card may receive a copy of the digital receipt, process

the digital signature and then return the signed receipt to the

cash register for sending of the electronic receipts)

Accordingly it would have been obvious to one of ordinary skill in the art at time

of applicant's invention to modify the method of Filtcroft et al and incorporate the

method comprising receiving from a terminal, a digitally signed transaction record

comprising a digital signature [[from]]generated on the portable transaction device~

wherein the digitally signed transaction record comprises bill details provided by the

terminal to the portable transaction device prior to the creation of the digital signature,

wherein the bill details specify an amount to be paid for a transaction corresponding to

the transaction record, wherein the digitally signed transaction record further comprises

a particular identifier selected by the portable transaction prior to the creation of the

digital signature in view of the teachings of Tognazzini in order to facilitate transaction

and further ensure security of the transaction.

25. As per **claim 18**, Flitcroft further discloses the method, wherein the identifiers are

unique to the account for the agency (col. 25, lines 40-55; col. 27, lines 35-60).

26. As per **claim 19**, Flitcroft further discloses the method further comprising adding

the identifiers to an index, wherein said index maps from an identifier to the

corresponding account (col. 10, lines 1-20).

27.   As per **claim 20,** Flitcroft further discloses the method wherein the multiple

identifiers are a subset of identifiers selected from a larger set of possible identifiers

(col. 27, lines 35-60)

28.   As per **claim 21**, Flitcroft further discloses the method wherein the identifier

within said set of multiple identifiers are unrelated to one another (col. 27, lines 35-60)

29.   As per **claim 22**, Flitcroft further discloses the method, wherein the identifiers are

generated on the agency computer system, and are transmitted to the portable

transaction device for storage thereon (col. 10, lines 25-55).

30.   As per **claim 23**, Flitcroft further discloses the method further comprising

generating at least one cryptographic key for use with the account (col. 2, lines 40-55).

31.   As per **claim 25**, Flitcroft further discloses the method, further comprising

establishing an identity of a person who is to hold the account prior to opening the

account (see fig. 5).

32.   **Claim 24, is** rejected under 35 U.S.C. 103(a) as being unpatentable over Flitcroft

et al (hereinafter "Flitcroft") U.S. Patent No. 7,136,835 B1 in view of Carlisle et al

(hereinafter "Carlisle") U.S. Patent No. 5,649,118 and Tognazzini U.S. Patent No.

5,739,512 and further in view of Bahar U.S. Patent Application Publication No.

2005/0001027 A1.

33.   As per **claim 24**, both Flitcroft, Carlisle and Tognazzini failed to explicitly disclose

the method further comprising making a prepayment onto the account prior to using the

account for transactions.

    Bahar discloses the method, further comprising making a prepayment onto the

account prior to using the account for transactions (0035, which discloses adding value

to the smart card...and using the smart card to prepay telecommunication services...).

    Accordingly it would have been obvious to one of ordinary skill in the art at time

of applicant's invention to modify the method of Flitcroft and incorporate the method,

further comprising making a prepayment onto the account prior to using the account for

transactions in view of the teachings of Bahar, in order to facilitate the transaction.

34.   **Claims 15, 36-37 and 39,** are rejected under 35 U.S.C. 103(a) as being

unpatentable over Flitcroft et al (hereinafter "Flitcroft") U.S. Patent No. 7,136,835 B1 in

view of Pitroda U.S. Patent Application No. 2005/0247777A1 and further in view of

Tognazzini U.S. Patent No. 5,739,512

35.   As per **claim 15,** Flitcroft discloses an Apparatus for use in transactions,

including:

means for storing a set of multiple identifiers associated with a same customer account, wherein said multiple identifiers are also known to an agency providing said customer account *(see fig. 1, which discloses credit card #s; see fig. 2, which discloses allocate new limited use cards; col. 10, lines 28-55, which discloses a local card dispenser 128 can be employed to generate a plurality of limited-use cards 132 and/or a master credit card 134 for delivery to a customer)*,

means for selecting, for each of a plurality of transactions involving the same customer account, a different identifier from said set of multiple identifiers for use with the respective transaction *(col. 5, lines 50-60, which discloses that the numbers are randomly selected from a queue of available limited-use credit card numbers based upon the requests and/or needs of different customers; col. 11, lines 1-15, which discloses that the process begins in step 202 by allocating one or more limited-use numbers to a customer. These numbers are ultimately selected from the list 126 of available limited-use numbers, or some other sub-set list which has been previously formed from the numbers in list 126)*

means for communicating with a terminal *(see fig. 1, which discloses merchant terminal)*

36.   What Flitcrosft does not explicitly disclose is

means for receiving bill details for each of the plurality of transactions from the

terminal, wherein the bill details specify an amount to be paid for the respective

transaction;

means for creating a respective transaction record for each of the plurality of

transactions, wherein the respective transaction record includes the bill details and the

selected identifier for that transaction;

means for digitally signing the respective transaction record, wherein the digitally

signed respective transaction record comprises a digital signature that is generated

using a cryptographic key, wherein the digitally signed respective transaction record

includes the bill details and the selected identifier, and

means for providing the digitally signed respective transaction record to the

terminal.

37.   Pitroda discloses the method comprising:

means for receiving bill details for each of the plurality of transactions from the

terminal, wherein the bill details specify an amount to be paid for the respective

transaction *(0089, which discloses that the point of sales computer*

will download and display the transaction details, as shown in

FIG. 16, and transmit the transaction information into the

memory of the UET card, on which the transaction information may

be displayed for visual verification by the customer; 0099,

which discloses the amount of the transaction; 0100, which

discloses that user has the option of entering an amount for a

tip or gratuity that is in addition to the amount to be paid for

the product);

means for creating a respective transaction record for each of the plurality of

transactions, wherein the respective transaction record includes the bill details and the

selected identifier for that transaction *(0089; 0100, which discloses*

"transmits completed details of the sales transaction to the

point of sales computer, the UET card, and the American Express

service… the details include the date of the transaction, the

amount, the name of the retail store or service (for the UET

card and the American Express service records), the name of the

customer (for the American Express and point of sales computers)

38.   Tognazzini discloses the method comprising:

means for digitally signing the respective transaction record, wherein the digitally

signed respective transaction record comprises a digital signature that is generated

using a cryptographic key, wherein the digitally signed respective transaction record

includes the bill details and the selected identifier (*col. 2, lines 40-55, which*

discloses that the electronic copy may be digitally signed by

either the vendor, the customer or both before sending it to the

electronic mail address… a customer's smart card may receive a

copy of the digital receipt, process the digital signature and

then return the signed receipt to the cash register for sending

of the electronic receipts), and

means for providing the digitally signed respective transaction record to the

terminal (*col. 2, lines 40-55, which discloses that a customer's*

smart card may receive a copy of the digital receipt, process

the digital signature and then return the signed receipt to the

cash register for sending of the electronic receipts)

Accordingly it would have been obvious to one of ordinary skill in the art at time

of applicant's invention to modify the method of Walker et al and incorporate the

apparatus, including means for receiving bill details for each of the plurality of

transactions from the terminal, wherein the bill details specify an amount to be paid for

the respective transaction; means for creating a respective transaction record for each

of the plurality of transactions, wherein the respective transaction record includes the bill

details and the selected identifier for that transaction; means for digitally signing the

respective transaction record, wherein the digitally signed respective transaction record

comprises a digital signature that is generated using a cryptographic key, wherein the

digitally signed respective transaction record includes the bill details and the selected

identifier, and means for providing the digitally signed respective transaction record to

the terminal in view of the teachings of Pitroda and Tognazzini in order to facilitate

transaction and further ensure security of the transaction.

39.   As per **claims 36-37 and 39**, Flitcroft discloses a computer account system at an

agency, said system comprising:

a plurality of customer account records, wherein each customer account record incorporates a set of multiple identifiers associated therewith (see figs. 1, 3, 5 and 9), and

a stored index that indicates a mapping of each of the sets of multiple identifiers to corresponding account record of said plurality of stored customer account records wherein each set of said multiple sets is also stored on a respective portable transaction device of a plurality of portable transaction devices that are distinct from said system (see fig. 8; col. 10, lines 1-20),

wherein the system is configured to:

receive from a terminal, a digitally signed transaction record generated by a particular portable transaction device for a transaction on a customer account, wherein the digitally signed transaction record comprises a digital signature generated by the particular portable transaction device associated with the customer account, wherein the digitally signed transaction record includes bill details provided by the terminal to the particular portable transaction device, wherein the digitally signed transaction record further includes a particular identifier selected by the particular portable transaction device from the set of identifiers stored within that portable transaction device;

wherein the bill details specify an amount to be paid for the transaction;

in response to validating the digital signature with a cryptographic key, access the particular identifier within the digitally signed transaction record, determine a particular set of multiple identifiers to which the accessed identifier belongs, and determine the particular customer account to which the accessed identifier belongs as

specified by said index (*see fig. 8, which discloses determine associated account numbers; see fig. 9, which discloses access account information*), and

update an account record of the particular customer account in regard to the transaction *(see col. 16, lines 20-40, which discloses that these limitations can be altered once a number is issued by updating the issuer database and the user maintained list of numbers. Communication between the user and card issuer to make these changes can be posted, conveyed verbally or electronically).*

40. What Flitcroft does not explicitly teach is:

receive from a terminal, a digitally signed transaction record generated by a particular portable transaction device for a transaction on a customer account, wherein the digitally signed transaction record comprises a digital signature generated by the particular portable transaction device associated with the customer account, wherein the digitally signed transaction record includes bill details provided by the terminal to the particular portable transaction device, wherein the digitally signed transaction record further includes a particular identifier selected by the particular portable transaction device from the set of identifiers stored within that portable transaction device;

wherein the bill details specify an amount to be paid for the transaction;

41. Tognazzini discloses the system

wherein the system is configured to:

receive from a terminal, a digitally signed transaction record generated by a

particular portable transaction device for a transaction on a customer account, wherein

the digitally signed transaction record comprises a digital signature generated by the

particular portable transaction device associated with the customer account, wherein

the digitally signed transaction record includes bill details provided by the terminal to the

particular portable transaction device, wherein the digitally signed transaction record

further includes a particular identifier selected by the particular portable transaction

device from the set of identifiers stored within that portable transaction device (*(col.*

2, lines 40-55, which discloses that the electronic copy may be

digitally signed by either the vendor, the customer or both

before sending it to the electronic mail address… a customer's

smart card may receive a copy of the digital receipt, process

the digital signature and then return the signed receipt to the

cash register for sending of the electronic receipts)

42. Pitroda discloses the system

wherein the bill details specify an amount to be paid for the transaction (*0099,*

which discloses the amount of the transaction; 0100, which

discloses that user has the option of entering an amount for a

tip or gratuity that is in addition to the amount to be paid for

the product)

Accordingly it would have been obvious to one of ordinary skill in the art at time

of applicant's invention to modify the method of Walker et al and incorporate the system

wherein receive from a terminal, a digitally signed transaction record generated by a particular portable transaction device for a transaction on a customer account, wherein the digitally signed transaction record comprises a digital signature generated by the particular portable transaction device associated with the customer account, wherein the digitally signed transaction record includes bill details provided by the terminal to the particular portable transaction device, wherein the digitally signed transaction record further includes a particular identifier selected by the particular portable transaction device from the set of identifiers stored within that portable transaction device; wherein the bill details specify an amount to be paid for the transaction; in view of the teachings of Tognazzini and Pitroda in order to facilitate transaction and further ensure security of the transaction.

43.   As per **claim 37**, Flitcroft further discloses the system, wherein the multiple identifiers associated with a customer account record are unique to that account record (col. 25, lines 40-55; col. 27, lines 35-60).

44.   **Claim 16**, is rejected under 35 U.S.C. 103(a) as being unpatentable over Flitcroft et al (hereinafter "Flitcroft") U.S. Patent No. 7,136,835 B1 in view of Pitroda U.S. Patent Application No. 2005/0247777A1

45.   As per **claim 16**, Flitcroft discloses an apparatus for use in making a transaction, including:

non-volatile memory containing a set of multiple identifiers, wherein said multiple identifiers are also known to an agency associated with the transaction *(see figs. 3, and 4, which discloses master credit card number; see fig. 5, which discloses allocate limited use numbers to the master credit card number step 504....print multiple numbers on a single card step 506; col. 2, lines 25-30)*, and

a processor operable to randomly or pseudo-randomly select one identifier from said set of multiple identifiers for use in any transaction *(col. 5, lines 25-60, which discloses that the limited use credit card number is provided wherein the limited use credit card number is randomly chosen with respect to the master credit card number...")*.

a communications facility operable to communicate with a terminal (*(see fig. 1, which discloses merchant terminal)*
What Flitcroft does not explicitly teach is:

wherein the apparatus is operable to:

receive bill details for the given transaction from the terminal through the communications faciliW, wherein the bill details specify an amount to be paid,

generate a transaction record that includes the bill details and the given identifier that is randomly or pseudo-randomly selected by the processor from said set of multiple identifiers,

digitally sign the transaction record with a digital signature, the digitally si~ned transaction record including the bill details and the given identifier; and

transmit the digitally signed transaction record to the terminal through the communications facility.

46.   Pitroda discloses the the apparatus for use in transaction including:

wherein the apparatus is operable to:

receive bill details for the given transaction from the terminal through the communications facility, wherein the bill details specify an amount to be paid (*0089, which discloses that the point of sales computer will download and display the transaction details, as shown in FIG. 16, and transmit the transaction information into the memory of the UET card, on which the transaction information may be displayed for visual verification by the customer; 0099, which discloses the amount of the transaction; 0100, which discloses that user has the option of entering an amount for a tip or gratuity that is in addition to the amount to be paid for the product*),

generate a transaction record that includes the bill details and the given identifier that is randomly or pseudo-randomly selected by the processor from said set of multiple identifiers (*0089; 0100, which discloses "transmits completed details of the sales transaction to the point of sales computer, the UET card, and the American Express service… the details include the date of the transaction, the amount, the name of the retail store or service (for the UET card and the American Express*

service records), the name of the customer (for the American

Express and point of sales computers),

Accordingly it would have been obvious to one of ordinary skill in the art at time

of applicant's invention to modify the method of Flitcroft and incorporate the apparatus,

including receive bill details for the given transaction from the terminal through the

communications facility, wherein the bill details specify an amount to be paid, generate

a transaction record that includes the bill details and the given identifier that is randomly

or pseudo-randomly selected by the processor from said set of multiple identifiers,

digitally sign the transaction record with a digital signature, the digitally signed

transaction record including the bill details and the given identifier; and transmit the

digitally signed transaction record to the terminal through the communications facility in

view of the teachings of Pitroda and Tognazzini in order to facilitate transaction and

further ensure security of the transaction.

47. **Claim 30-31 and 33-35**, are rejected under 35 U.S.C. 102(e) as being

anticipated by Flitcroft et al (hereinafter "Flitcroft") U.S. Patent No. 7,136,835 B1 in view

of Tognazzini U.S. Patent No. 5,739,512

48. As per **claim 30**, Flitcroft discloses a method of operating a computer account

system at an agency, the method comprising:

maintaining a plurality of customer accounts on the computer account system

(see figs. 1, 3, 5 and 9);

storing multiple sets of identifierson the computer account system, wherein each

said sets is associated with a respective one of said customer accounts, wherein each

of said sets comprises at least two identifiers belonging to the set wherein each of the

sets is also stored on a respective portable transaction device of a plurality of portable

transaction devices *(see fig. 9, which discloses allocate additional*

credit card numbers to the master credit card number);

receiving from a terminal, a digitally signed transaction record generated by a

particular portable transaction device for a transaction on a given customer account,

wherein the digitally signed transaction record comprises a digital signature generated

by the particular portable transaction device associated with the customer account ;

wherein the digitally signed transaction record includes bill details provided by

the terminal to the particular portable transaction device, wherein the digitally signed

transaction record further includes a particular identifier selected by the particular

portable transaction device from the set of identifiers stored within that portable

transaction device;

verifying the digital signature *(col. 19, lines 40-50, which discloses*

that the use of digital signature verification to verify both

parties…);

accessing the particular identifier within the digitally signed transaction record;

from said multiple identifiers, determining a particular set of identifiers to which

the accessed identifiers belongs and from the determined particular set determining a

particular customer account for the transaction, wherein the particular customer account

is a customer account to which the particular set is associated *(see fig. 8, which discloses determine associated account numbers)* and

updating an account record of the particular customer account in respect of the transaction *(see col. 16, lines 20-40, which discloses that these limitations can be altered once a number is issued by updating the issuer database and the user maintained list of numbers. Communication between the user and card issuer to make these changes can be posted, conveyed verbally or electronically)*

49. What Flitcroft does not explicitly teach is:

receiving from a terminal, a digitally signed transaction record generated by a particular portable transaction device for a transaction on a given customer account, wherein the digitally signed transaction record comprises a digital signature generated by the particular portable transaction device associated with the customer account

wherein the digitally signed transaction record includes bill details provided by the terminal to the particular portable transaction device, wherein the digitally signed transaction record further includes a particular identifier selected by the particular portable transaction device from the set of identifiers stored within that portable transaction device.

Flitcroft however discloses that this may include digitally signing transaction record()and the secure storage of transaction details and date of use.

50. Tognazzini discloses the method comprising:

receiving from a terminal, a digitally signed transaction record generated by a particular portable transaction device for a transaction on a given customer account, wherein the digitally signed transaction record comprises a digital signature generated by the particular portable transaction device associated with the customer account *(col. 2, lines 40-55, which discloses a customer's smart card may receive a copy of the digital receipt, process the digital signature and then return the signed receipt to the cash register for sending of the electronic receipts)*

wherein the digitally signed transaction record includes bill details provided by the terminal to the particular portable transaction device, wherein the digitally signed transaction record further includes a particular identifier selected by the particular portable transaction device from the set of identifiers stored within that portable transaction device (*col. 2, lines 40-55, which discloses that the electronic copy may be digitally signed by either the vendor, the customer or both before sending it to the electronic mail address… a customer's smart card may receive a copy of the digital receipt, process the digital signature and then return the signed receipt to the cash register for sending of the electronic receipts)*

Accordingly it would have been obvious to one of ordinary skill in the art at time of applicant's invention to modify the method of Walker et al and incorporate the method wherein the digitally signed transaction record includes bill details provided by the

terminal to the particular portable transaction device, wherein the digitally signed

transaction record further includes a particular identifier selected by the particular

portable transaction device from the set of identifiers stored within that portable

transaction device in view of the teachings of Tognazzini in order to facilitate transaction

and further ensure security of the transaction.

51.   As per **claim 31**, Flitcroft further discloses the method, wherein determining

which set of multiple identifiers the accessed identifier belongs to comprises accessing

an index that maps identifiers to corresponding account records (see fig. 8; col. 10, lines

1-20).

52.   As per **claim 33**, Flitcroft discloses the method, further comprising

          opening a new customer account by: creating a new account record for the new

customer account (see fig. 2, which discloses allocate new limited use cards; col. 6,

lines 30-50, which discloses allocated by the credit card provider to the customer for his

or her account; col. 7, lines 20-55; col. 14, lines 35-60), and

          storing a set of multiple identifiers associated with the new customer account into

the new account record (see fig. 9, which discloses allocate additional credit card

numbers to the master credit card number; col. 10, lines 1-20).

53.   As per **claim 34**, Flitcroft further discloses the method, further comprising:

generating the set of multiple identifiers associated with the new customer

account (col. 10, lines 28-55, which discloses a local card dispenser 128 can be

employed to generate a plurality of limited-use cards 132 and/or a master credit card

134 for delivery to a customer), and

transmitting the generated set of multiple identifiers to a customer transaction

device for use with the new customer account (col. 10, lines 28-55).

54.   As per **claim 35**, Flitcroft further discloses the method, further comprising

generating at least one cryptographic key for use in communications between the

computer account system and the customer transaction device (col. 2, lines 40-55).

Conclusion

55.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to **Charles C.L. Agwumezie** whose number is **(571) 272-**

6838. The examiner can normally be reached on Monday – Friday 8:00 am – 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Calvin Hewitt can be reached on **(571) 272 – 6709**.

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have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll free). If you would like assistance from a USPTO

Customer Service Representative or access to the automated information system, call

800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Charlie C Agwumezie/
Primary Examiner, Art Unit 3685
February 24, 2010